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CLAIMS

What is claimed is:

1. A method for discovering status of a network topology, comprising the steps of:

- 5 presenting an interface having a menu, the menu having a plurality of alternative discovery methods;
 responsive to user input, establishing an order in which the alternative discovery methods should be performed;
 and
10 executing the alternative discovery methods in the established order.

2. The method as recited in claim 1, further comprising:
 maintaining a record of devices in the network which are discovered through a first discovery method; and
15 removing those devices in the record from discovery through a second discovery method.

3. The method as recited in claim 1, further comprising:
 maintaining a dynamically gathered record of devices which are compliant to at least one of a first discovery
20 method and a second discovery method; and
 using an appropriate discovery method according to the record.

4. The method as recited in claim 3, further comprising:
 altering the established order of the devices in the
25 network according to a first number of devices compliant to the first discovery method and a second number of devices compliant to the second discovery method according to the record.

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5. The method as recited in claim 1, wherein the alternative discovery methods are at least one of a simple network management protocol (SNMP), an Internet protocol packet Internet Groper (IP ping), a point-to-point over ethernet (PPPoE), and a dynamic host configuration protocol (DHCP).
6. The method as recited in claim 1, further comprising: modifying the established order of the alternative discovery methods based on a predetermined criteria.
- 10 7. The method as recited in claim 1, further comprising: enabling a mixture of the alternative discovery methods.
- 15 8. A method for discovering status of a network topology, comprising the steps of:
discovering a status for an existing network topology;
determining a next discovery action based on an event;
and
determining a policy based on a network response time,
20 wherein the network response time is further based on at least one of a previous status of the existing network topology and a discovery event.
- 25 9. The method as recited in claim 8, wherein the event is one of a data gathering event, a discovery event and a configuration event.
10. The method as recited in claim 8, wherein determining the policy based on a network response time is determined by a count of devices within the network.

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11. The method as recited in claim 8, wherein determining the policy based on a network response time is determined by relative abilities of devices in the network.

12. The method as recited in claim 8, further comprising:
5 storing a status for the existing network topology; and
developing an order of relative capabilities for a managed device as compared to other device or devices in the network.

13. The method as recited in claim 8, wherein discovering a
10 status for an existing network topology further includes
employing a single device status gathering technique if a count of devices left to discover is less than a predetermined amount.

14. The method as recited in claim 13, wherein the status
15 gathering technique is an Internet protocol packet Internet Groper (IP ping).

15. The method as recited in claim 8, wherein discovering a
status for an existing network topology further includes
employing a multiple device status gathering technique if a
20 count of devices left to discover is more than a predetermined amount.

16. The method as recited in claim 15, wherein the status gathering technique is a simple network management protocol (SNMP).

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17. The method as recited in claim 8, wherein discovering a status for an existing network topology includes determining a best order to discover the status for the existing network topology.

5 18. A computer program product in a computer-readable medium for discovering status of a network topology, comprising:

instructions for presenting an interface having a menu, the menu having a plurality of alternative discovery
10 methods;

instructions, responsive to user input, for establishing an order in which the alternative discovery methods should be performed; and

15 instructions for executing the alternative discovery methods in the established order.

19. The computer program product as recited in claim 18, further comprising:

instructions for maintaining a record of devices in the network which are discovered through a first discovery
20 method; and

instructions for removing those devices in the record from discovery through a second discovery method.

20. The computer program product as recited in claim 18, further comprising:

25 instructions for maintaining a dynamically gathered record of devices which are compliant to at least one of a first discovery method and a second discovery method; and

instructions for using an appropriate discovery method according to the record.

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21. The computer program product as recited in claim 20, further comprising:

instructions for altering the established order of the devices in the network according to a first number of
5 devices compliant to the first discovery method and a second number of devices compliant to the second discovery method according to the record.

22. The computer program product as recited in claim 18, wherein the alternative discovery methods are at least one
10 of a simple network management protocol (SNMP), an Internet protocol packet Internet Groper (IP ping), a point-to-point over ethernet (PPPoE), and a dynamic host configuration protocol DHCP).

23. The computer program product as recited in claim 18, further comprising:
15 instructions for modifying the established order of the alternative discovery methods based on a predetermined criteria.

24. The computer program product as recited in claim 18, further comprising:
20 instructions for enabling a mixture of the alternative discovery methods.

25. A computer program product for discovering status of a network topology, comprising:

instructions for discovering a status for an existing network topology;

instructions for determining a next discovery action based on an event; and

30 instructions for determining a policy based on a

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network response time, wherein the network response time is further based on at least one of a previous status of the existing network topology and a discovery event.

26. The computer program product as recited in claim 25,
5 wherein the event is one of a data gathering event, a discovery event and a configuration event.

27. The computer program product as recited in claim 25, wherein determining the policy based on a network response time is determined by a count of devices within the network.

10 28. The computer program product as recited in claim 25, wherein determining the policy based on a network response time is determined by relative abilities of devices in the network.

29. The computer program product as recited in claim 25,
15 further comprising:
instructions for storing a status for the existing network topology; and

instructions for developing an order of relative capabilities for a managed device as compared to other
20 device or devices in the network.

30. The computer program product as recited in claim 25, wherein discovering a status for an existing network topology further includes employing a single device status gathering technique if a count of devices left to discover
25 is less than a predetermined amount.

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31. The computer program product as recited in claim 30,
wherein the status gathering technique is an Internet
protocol packet Internet Groper (IP ping).

5 32. The computer program product as recited in claim 25,
wherein discovering a status for an existing network
topology further includes employing a multiple device status
gathering technique if a count of devices left to discover
is more than a predetermined amount.

10 33. The computer program product as recited in claim 32,
wherein the status gathering technique is a simple network
management protocol (SNMP).

15 34. The computer program product as recited in claim 25,
wherein discovering a status for an existing network
topology includes determining a best order to discover the
status for the existing network topology.

35. A system for discovering status of a network topology,
comprising:

20 presenting means for presenting an interface having a
menu, the menu having a plurality of alternative discovery
methods;

establishing means, responsive to user input, for
establishing an order in which the alternative discovery
methods should be performed; and

25 executing means for executing the alternative discovery
methods in the established order.

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36. A system for discovering status of a network topology, comprising:

discovering means for discovering a status for an existing network topology;

5 determining means for determining a next discovery
action based on an event; and

determining means for determining a policy based on a network response time, wherein the network response time is further based on at least one of a previous status of the existing network topology and a discovery event.